

**CENTER FOR DRUG EVALUATION AND
RESEARCH**

APPLICATION NUMBER:
40333

CORRESPONDENCE

August 31, 1998

Mr. Douglas Sporn
Office of Generic Drugs
Center for Drug Evaluation and Research
Food and Drug Administration
Metro Park North II, HFD-600
Attention: Documentation Control Room #150
7500 Standish Place
Rockville, MD 20855-2773

RECEIVED

SEP 01 1998

GENERIC DRUGS

RE: Fluorouracil Injection, USP
50 mg/mL
ANDA: Number to be Assigned

Dear Mr. Sporn:

In accordance with Section 314.92 of the *Code of Federal Regulations, Title 21*, we hereby submit an Abbreviated New Drug Application for Fluorouracil Injection, USP, a parenteral preparation, supplied as:

Strength	Drug Content	How Supplied
50 mg/mL	500 mg Fluorouracil per vial	10 mL single dose polymer vial

Fluorouracil Injection, USP (50 mg/mL), is the generic version of Fluorouracil Injection manufactured by Roche Laboratories, pursuant to NDA No. 12-209. The Roche Laboratories drug product appears in the FDA listing titled *Approved Drug Products with Therapeutic Equivalence Evaluation, 18th Edition*. Our drug product has the same active and inactive ingredients, dosage form, strength, route of administration, and conditions of use as the Roche Laboratories listed drug product.

Four (4) copies of the proposed labeling have also been provided in **Section V** of the application in both the archival and review copies.

One (1) stability lot was manufactured and stability data are presented in **Section XVII** of this application.

The application consists of three (3) volumes and has been formatted in accordance with the Office of Generic Drug's Policy and Procedure Guide #30-91 issued April 10, 1991; and, as modified by FDA's October 14, 1994 letter to all NDA, ANDA, and AADA applicants. Copies are provided as follows:

- 1) One (1) Archival Copy bound in Blue Jackets
- 2) One (1) Review Copy bound in Red Jackets

Although a USP monograph exists for the finished product, the method utilized by Gensia Sicor to evaluate the Finished Product for Assay and Impurities differs slightly but has been demonstrated to be equivalent to the USP. Consequently, three (3) additional methods validation packages have been included in this application and are marked "Analytical Methods". These three additional copies are identical to **Section XVI** as presented in the archival and review copies, and have been separately bound in Black Jackets.

A true copy of this application, which was bound in Burgundy Jackets, has been submitted to the U.S. Food and Drug Administration of Irvine, California, Los Angeles District Office.

We trust you will find the information in this application satisfactory for your review and approval. If there are any questions concerning this application, please do not hesitate in contacting me at (949) 457-2808 or by facsimile at (949) 583-7351.

Sincerely,



Rosalie A. Lowe
Associate Director, Regulatory Affairs

S:\FLUORO\ANDA\SEC1.

cc: Ms. Elaine Messa
District Director
U.S. Food and Drug Administration
Los Angeles District
19900 MacArthur Blvd., Suite 300
Irvine, CA 92715

100004

September 16, 1998

NEW CORRESP

N/C

Mr. Douglas Sporn
Office of Generic Drugs
Center for Drug Evaluation and Research
Food and Drug Administration
Metro Park North II, HFD-600
Attention: Documentation and Control Room, Room 150
7500 Standish Place
Rockville, MD 20855-2773

RE: **Fluorouracil Injection, USP**
Single Dose Vial
ANDA 40-333

FACSIMILE AMENDMENT

Dear Mr. Sporn:

Reference is made to our abbreviated new drug application, ANDA 40-333, for Fluorouracil Injection, USP, single dose vial, which was submitted on August 31, 1998. Reference is also made to the request on September 16, 1998, from Mr. Craig Davis, Office of Generic Drugs, FDA, for a revision to our first page of the Form FDA 356(h). Mr. Davis requested that Gensia Sicor revise the Form FDA 356(h) to eliminate the proprietary name. In accordance with the provisions of Section 314.96 of the *Code of Federal Regulations, Title 21*, we are hereby amending this application to respond to Mr. Davis' request.

We trust you will find the information in this amendment satisfactory for your review and approval. If there are any questions concerning this amendment, please do not hesitate in contacting me at (949) 457-2808 or by facsimile at (949) 583-7351.

Sincerely,



Rosalie A. Lowe
Associate Director, Regulatory Affairs

cc: Ms. Elaine Messa
District Director
U.S. Food and Drug Administration
Los Angeles District
19900 MacArthur Blvd., Suite 300
Irvine, CA 92715

RECEIVED

SEP 17 1998

GENSIA SICOR

March 31, 1999

Mr. Douglas Sporn
Office of Generic Drugs
Center for Drug Evaluation and Research
Food and Drug Administration
Metro Park North II, HFD-600
Attention: Documentation and Control Room, Room 150...
7500 Standish Place
Rockville, MD 20855-2773

NDA ORIG AMENDMENT

N/Ac

**RE: Fluorouracil Injection, USP
Single Dose Vial
ANDA 40-333**

MAJOR AMENDMENT

Dear Mr. Sporn:

Reference is made to our abbreviated new drug application, ANDA 40-333, for Fluorouracil Injection, USP, single dose vial, which was submitted on August 31, 1998. Reference is also made to the Agency's facsimile dated March 5, 1999. In accordance with the provisions of Section 314.96 of the *Code of Federal Regulations, Title 21*, we are hereby amending this application to provide the additional information requested.

We trust you will find the information in this amendment satisfactory for your review and approval. If there are any questions concerning this amendment, please do not hesitate in contacting me at (949) 457-2808 or Mr. Dwain K. Allen, Regulatory Project Specialist, at (949) 457-2861. I can also be contacted by facsimile at (949) 583-7351.

Sincerely,

Rosalie A. Lowe

Rosalie A. Lowe
Associate Director, Regulatory Affairs

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cc: Ms. Elaine Messa
District Director
U.S. Food and Drug Administration
Los Angeles District
19900 MacArthur Blvd., Suite 300
Irvine, CA 92715

APR 1 1999

APR 1 1999

October 25, 1999

Mr. Douglas Sporn
Office of Generic Drugs
Center for Drug Evaluation and Research
Food and Drug Administration
Metro Park North II, HFD-600
Attention: Documentation and Control Room, Room 150
7500 Standish Place
Rockville, MD 20855-2773

NDA ORIG AMENDMENT

N/Am

**RE: Fluorouracil Injection, USP
ANDA 40-333**

MINOR AMENDMENT

Dear Mr. Sporn:

Reference is made to our abbreviated new drug application, ANDA 40-333, for Fluorouracil Injection, USP, single dose vial, which was submitted on August 31, 1998. Reference is also made to our amendment dated March 31, 1999. Further reference is made to the Agency's facsimile dated September 24, 1999.

In accordance with the provisions of Section 314.96 of the *Code of Federal Regulations, Title 21*, we are hereby amending this application to provide the additional **chemistry and labeling** information requested.

We trust you will find the information in this amendment satisfactory for your review and approval. If there are any questions concerning this amendment, please do not hesitate in contacting me at (949) 457-2808 or Mr. Dwain K. Allen, Regulatory Project Specialist, at (949) 457-2861. I can also be contacted by facsimile at (949) 583-7351.

Sincerely,

Rosalie A. Lowe

Rosalie A. Lowe
Associate Director, Regulatory Affairs

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cc: Mr. Thomas Sawyer
Acting District Director
U.S. Food and Drug Administration
Los Angeles District
19900 MacArthur Blvd., Suite 300
Irvine, CA 92715



N/Am
10-29-99

November 12, 1999

NOTED FOR REVIEW

pm

Mr. Douglas Sporn
Office of Generic Drugs
Center for Drug Evaluation and Research
Food and Drug Administration
Metro Park North II, HFD-600
Attention: Documentation and Control Room, Room 150
7500 Standish Place
Rockville, MD 20855-2773

RE: Fluorouracil Injection, USP
ANDA 40-333

MINOR AMENDMENT

Dear Mr. Sporn:

Reference is made to our abbreviated new drug application, ANDA 40-333, for Fluorouracil Injection, USP, single dose vial, which was submitted on August 31, 1998. Reference is also made to our recent amendment dated October 25, 1999, that responded to the Agency's facsimile of September 24, 1999.

In accordance with the provisions of Section 314.96 of the *Code of Federal Regulations, Title 21*, we are hereby amending this application to provide additional **chemistry** information related to the stability of the product.

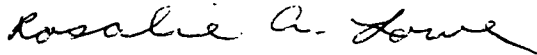
Following the submission of our October amendment, stability data at the 18-month time point became available. Upon evaluation of the stability trend in light of this additional data point, we have determined and now propose an 18-month expiration dating period for this product. To further accommodate this proposal, the assay release specifications for the in-process bulk and finished product have been changed to narrow the ranges, % and %, respectively. The additional room temperature stability data are attached for your review.

11-16-99

Mr. Douglas Sporn
November 12, 1999
Page 2

We trust you will find the information in this amendment satisfactory for your review and approval. If there are any questions concerning this amendment, please do not hesitate in contacting me at (949) 457-2808. I can also be contacted by facsimile at (949) 583-7351.

Sincerely,



Rosalie A. Lowe
Associate Director, Regulatory Affairs

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Attachment

cc: Mr. Thomas Sawyer
Acting District Director
U.S. Food and Drug Administration
Los Angeles District
19900 MacArthur Blvd., Suite 300
Irvine, CA 92715

December 21, 1999

Mr. Douglas Sporn
Office of Generic Drugs
Center for Drug Evaluation and Research
Food and Drug Administration
Metro Park North II, HFD-600
Attention: Documentation and Control Room, Room 150
7500 Standish Place
Rockville, MD 20855-2773

NDA ORIG AMENDMENT
N/A, W

**RE: Fluorouracil Injection, USP
ANDA 40-333**

**MINOR AMENDMENT
CHEMISTRY AND MICROBIOLOGY**

Dear Mr. Sporn:

Reference is made to our abbreviated new drug application, ANDA 40-333, for Fluorouracil Injection, USP, single dose vial, which was submitted on August 31, 1998. Reference is also made to the Agency's facsimile dated December 10, 1999.

In accordance with the provisions of Section 314.96 of the *Code of Federal Regulations, Title 21*, we are hereby amending this application to provide the additional **chemistry and microbiology** information requested.

We trust you will find the information in this amendment satisfactory for your review and approval. If there are any questions concerning this amendment, please do not hesitate in contacting me at (949) 457-2808. I can also be contacted by facsimile at (949) 583-7351.

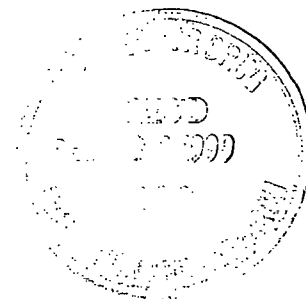
Sincerely,

Rosalie A. Lowe

Rosalie A. Lowe
Associate Director, Regulatory Affairs

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cc: Mr. Thomas Sawyer
Acting District Director
U.S. Food and Drug Administration
Los Angeles District
19900 MacArthur Blvd., Suite 300
Irvine, CA 92715



N/A, W
12-28-99

January 7, 2000

Mr. Douglas Sporn
Office of Generic Drugs
Center for Drug Evaluation and Research
Food and Drug Administration
Metro Park North II, HFD-600
Attention: Documentation and Control Room, Room 150
7500 Standish Place
Rockville, MD 20855-2773

ANDA 40-333 AMENDMENT
N/A

**RE: Fluorouracil Injection, USP
ANDA 40-333**

TELEPHONE AMENDMENT - CHEMISTRY

Dear Mr. Sporn:

Reference is made to our abbreviated new drug application, ANDA 40-333, for Fluorouracil Injection, USP, single dose vial, which was submitted on August 31, 1998. Reference is also made to our amendment dated December 21, 1999. Further reference is made to my recent telephone conversation with Mr. Mike Smela, OGD, regarding the test results on the reference listed drug (RLD) submitted December 21, 1999.

In accordance with the provisions of Section 314.96 of the *Code of Federal Regulations, Title 21*, we are hereby amending this application to specify that the RLD was stored under recommended labeled storage conditions until testing. In addition, the RLD batch (Fluorouracil Injection, Lot No. 1222, exp. 4/98) was tested April 29, 1998.

We trust you will find the information in this amendment satisfactory for your review and approval. If there are any questions concerning this amendment, please do not hesitate in contacting me at (949) 457-2808. I can also be contacted by facsimile at (949) 583-7351.

Sincerely,

Rosalie A. Lowe

Rosalie A. Lowe
Associate Director, Regulatory Affairs

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cc: Mr. Thomas Sawyer
Acting District Director
U.S. Food and Drug Administration
Los Angeles District
19900 MacArthur Blvd., Suite 300
Irvine, CA 92715

